

Protection

# California Regional Water Quality Control Board

## Santa Ana Region



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Gray Davis
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September 26, 2002

Ken A. Miller
Director of Public Works
Department of Public Works
County of San Bernardino
222 West Hospitality Lane, 2<sup>nd</sup> Floor
San Bernardino, CA 92415

DIRECTIVE TO SUBMIT A WORK PLAN AND CONDUCT ADDITIONAL PERCHLORATE INVESTIGATION IN THE VICINITY OF THE MID-VALLEY LANDFILL, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA

Dear Mr. Miller:

As you are aware, perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins. These water supply wells are located downgradient of the Mid-Valley Sanitary Landfill (MVSL). Information that you and other local businesses provided to us in response to subpoenas indicates that: (1) perchlorate salts have historically been used in the manufacture and production of fireworks at industrial facilities located on property bordering the MVSL, during periods when the MVSL was actively accepting waste; and (2) bunkers were formerly used to store explosives, ordnance, propellant, and pyrotechnic chemicals (including perchlorate salts) adjacent to the MVSL, on property that now belongs to the County of San Bernardino (County). We recognize that the County has already initiated an effort to investigate and characterize the extent of perchlorate contamination in groundwater in the vicinity of the MVSL. We also understand that the County is currently considering additional drilling and sampling activities related to the perchlorate investigation. This letter sets forth a requirement under California Water Code Section 13267 that you submit the final report from the just-completed study, and conduct an additional investigation to further define the lateral and vertical extent of perchlorate in soil and groundwater in the vicinity of the MVSL. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

### **Background**

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the

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present, various suspected perchlorate dischargers, including the County's MVSL and adjacent properties owned by the County, have been identified.

#### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

#### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

#### Evidence Supporting the Need for the Investigation

Enclosed as attachments are the following documents:

- 1. Attachment 1 Well Location Map, showing perchlorate contamination in municipal water supply wells.
- 2. Attachment 2 Minutes from a November 12, 1987 meeting held by the Rialto Fire Department, in which the owners, contents, and usage of the bunkers are described (documents obtained from American Promotional Events, Inc., West in response to subpoena).
- 3. Attachment 3 Plot Plan showing the former configuration of the bunkers that were located on property adjacent to the landfill, and list of tenants and lessors using the bunkers.

The evidence indicates that the bunkers adjacent to the MVSL were used for storing explosives, ordnance, propellant, and pyrotechnic chemicals (including perchlorate salts), on property that now belongs to the County. County and Regional Board records indicate that the MVSL has actively accepted refuse since the late 1950s. The landfill was available for disposal of waste during the periods of use of the bunkers, and throughout the history of fireworks manufacturing, handling, and storage in the industrial areas northeast of the MVSL. In addition, gravel washing operations on County property may have contributed to the mobilization or spread of perchlorate. Perchlorate has been detected in groundwater downgradient of the County's properties (the former bunker area, and the MVSL). Groundwater samples from one of the County's downgradient compliance monitoring wells for the MVSL have indicated perchlorate concentrations in excess of 800 ppb. Based on the evidence, the County is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.



#### **Deadlines**

- 1. The final report for the County's August-September 2002 soil and groundwater investigation for perchlorate in the vicinity of the MVSL must be submitted to Board staff by October 7, 2002.
- A work plan for additional soil and groundwater investigation for perchlorate in the vicinity of the MVSL must be submitted to Board staff by October 26, 2002. The work plan shall address all County-owned property where perchlorate has been historically disposed of, used or stored. The work plan will be subject to my approval.
- 3. The investigation must commence within 30 days of approval.
- 4. All analytical results, groundwater measurements, and field information are to be submitted by fax to Board staff within 24 hours of being generated, throughout all stages of work, and during all phases of the investigation. The office fax number to be used for your data transmittals is (909) 781-6288.
- 5. The final report for this phase of the soil and groundwater investigation, including (at a minimum) the borehole logs, well construction details, groundwater elevation data, and soil and groundwater analytical results, must be submitted to Board staff within 30 days of completing the field work.

Failure to submit the required information by the specified deadline may subject you to administrative civil liability in the amount of up to \$1,000 per day, pursuant to Section 13268(a) and (b) of the California Water Code.

Finally, we remind you that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto and Colton Groundwater Subbasins. In addition, consistent with the Board's direction, we will be issuing similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and initiation of water supply replacement or treatment strategies. Board staff has experience in managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing alternative options for complying with this directive, please contact us to arrange a meeting.

If you have any questions about this letter, please contact Kamron Saremi at (909) 782-4303, or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,

Gerard J. Thibeault Executive Officer

California Environmental Protection Agency



#### Attachments:

- 1 Well Location Map, showing perchlorate contamination in municipal water supply wells.
- 2 Minutes from a November 12, 1987 meeting held by the Rialto Fire Department, in which the owners, contents, and usage of the bunkers are described (documents obtained from American Promotional Events, Inc., West in response to subpoena).
- 3 Plot Plan showing the former configuration of bunkers that were located on property adjacent to the MVSL, and list of tenants and lessors using the bunkers.
- 4 Mailing List.

cc w/out attachments:

Regional Board Jorge Leon, Office of Chief Counsel, SWRCB Inland Empire Perchlorate Regulatory Task Force (mailing list attached) Robert Jocks, Office of San Bernardino County Counsel Gary Lass, GeoLogic Associates

AES/Data/SLIC/Rialto perchlorate 01-02/13267/MVSL